Dresden Museum may be the result of local hybridization between the small Egyptian *P. d. niloticus* and *P. hispaniolensis*.

TABLE 1
Characters of the populations of the *Passer domesticus – hispaniolensis* superspecies

Population	Description	Hybrid index (Meise 1936: 664)
P. d. domesticus Europe & western Turkey	Grey crown, grey cheeks, restricted black throat, plain flanks, brown back, large	0
P. d. niloticus Egypt	Grey crown, grey cheeks, restricted black throat, plain flanks, brown back, small	0
P. d. italiae Italy, Crete	Brown crown, usually white cheeks, extensive black throat, plain flanks, usually brown back, large	40–60
P. hispaniolensis Southern Europe, south-west Asia, North Africa	Brown crown, white cheeks, extensive black throat, black streaked flanks, black and cream back, large	100

TABLE 2
Summary of taxonomic conclusions

Specimen	Description	Meise 1934	Watson
Type of "*P. rufipectus*" from Egypt	Large hybrid with reddish neck	=aberrant *P. domesticus niloticus* x *P. hispaniolensis*	=aberrant Cretan *P. d. italiae*
"*P. i. senckenbergianus*" from north-east Africa	Small hybrid with reddish neck	=aberrant *P. domesticus niloticus* x *P. hispaniolensis*	=aberrant *P. domesticus niloticus* x *P. hispaniolensis*
Dresden Mus. 1499 from Egypt	Small hybrid with reddish neck	=aberrant *P. domesticus niloticus* x *P. hispaniolensis*	=aberrant *P. domesticus niloticus* x *P. hispaniolensis*
Y.P.M. 60943 from Crete	Like "*rufipectus*" Hybrid index 57.5	—	=aberrant Cretan *P. d. italiae*
Y.P.M. 59427 from Turkey	*P. domesticus* with reddish neck Hybrid index 2.5	—	=aberrant *P. d. domesticus*

The validity of the genus *Lusciniola* Gray

by S. A. PARKER AND C. J. O. HARRISON

Received 6th December, 1962

Seebohm (1881) included eleven species in the genus *Lusciniola*. Subsequently, however, many of these were found to have affinities with other genera, and in more recent works the genus has been regarded as monotypic, containing only the type species, *Lusciniola melanopogon*, the Moustached Warbler.

This species does not appear to show any marked differences from

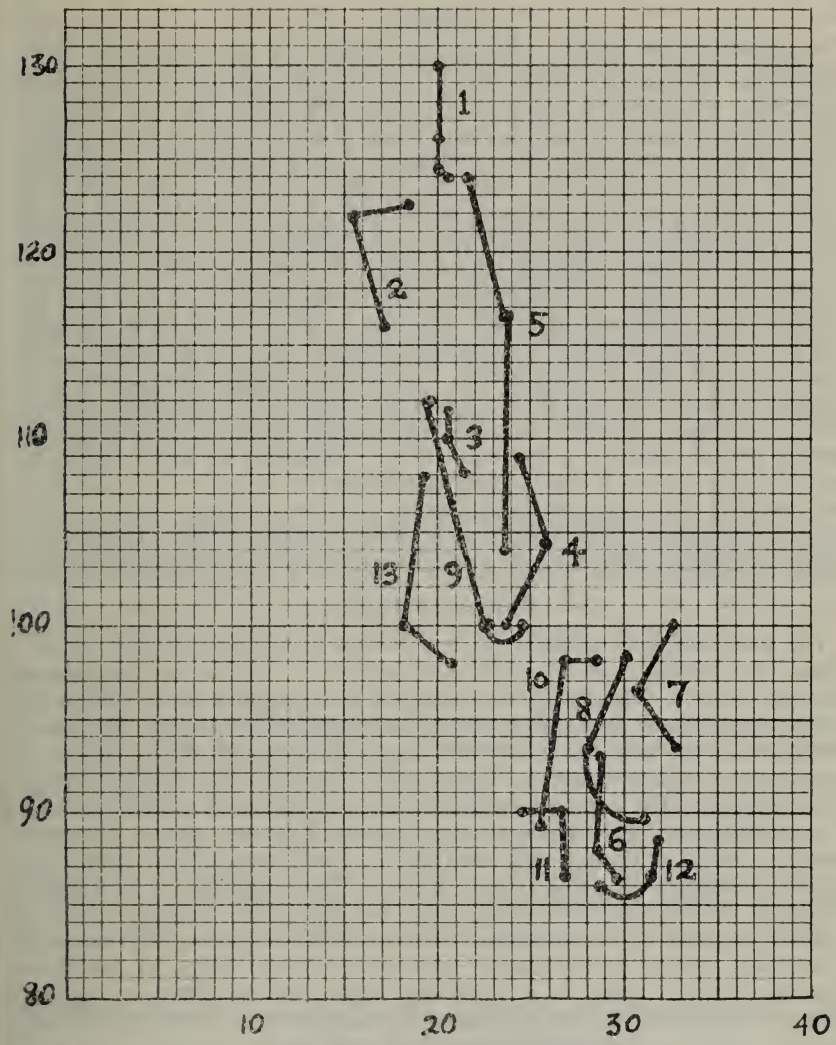
species of the genus *Acrocephalus*. It bears an extremely close resemblance to the Sedge Warbler, *A. schoenobaenus*, having a similar colour pattern, size, and shape and size of bill and legs; the tail being similar also but differing slightly in the degree of graduation shown by the tip. There is some difference in wing shape, *A. schoenobaenus* having a longer and narrower wing, while that of *L. melanopogon* is shorter and more rounded. The latter species is also darker and more red-brown on the dorsal surface, and paler underneath, while the former is a more buff-brown with less contrast between the upper and under side. The general similarity is very close and the colour difference is of a type which could normally be regarded as of merely subspecific value.

While the similarities are self-evident, it is difficult to discover what valid characters exist for the generic separation of *Lusciniola* from *Acrocephalus*. If one compares the descriptions of the two species in such works as the Handbook of British Birds (Witherby *et al.* 1938) one finds that the only characters which appear to be of critical value are the relative length of the tenth primary (=outermost or first primary of earlier systematists), the difference in the extent of the spring moult, and the behavioural character of cocking the tail.

LENGTH OF TENTH PRIMARY

In order to discover the validity of the relative length of the tenth primary as a generic character, random samples of this species were measured, and of as many species as possible of the genus *Acrocephalus*. In view of the small sample it is possible that the range of measurement within the species is greater than that shown, but this would not affect the inferences drawn from the resultant data. Data are shown on the accompanying graph. For the sake of clarity the small group of species found on the Pacific Islands, the data for which would appear at the lower end of the range shown, have been omitted.

The distance from the carpal joint to the tip of the tenth primary has been expressed as a percentage of the distance from the carpal joint to the tip of the longest primary covert, the latter being a reasonably conservative character in the wings of all the species concerned. It can be seen that the long tenth primary of *melanopogon* merely represents an extreme in a trend which is apparent throughout the genus *Acrocephalus*, and there is no evidence of a discontinuity at any point which could form a valid character for generic separation. The other value calculated was the roundedness of the wing. Here the distance between the first secondary and longest primary tips on the closed wing has been expressed as a percentage of the total wing-length. It can be seen that there is a consistent correlation between the two characters. The shorter and more rounded the wing, the longer the tenth primary will be. A short or vestigial tenth primary is usually associated with a long wing. This is considered to be an adaptive character, the longer wing and short tenth primary being found in migratory species, the shorter wing and longer tenth primary in sedentary species. This has been recognised in a number of different families (Kipp, 1942, 1958; Meinertzhagen, 1951; Dorst, 1962; Stegmann, 1962). On the evidence of primary feather length alone, there is no basis for maintaining the separate identity of *Lusciniola* and *Acrocephalus*.



The Validity of the Genus *Lusciniola*

Vertical axis—relative length of tenth primary=

$$\frac{\text{(Carpal joint to tip of 10th primary) 100}}{\text{carpal joint to tip of longest primary covert}}$$

Horizontal axis—relative roundedness of wing=

$$\frac{\text{(tip of 1st secondary to tip of longest primary) 100}}{\text{wing length}}$$

Species: 1, *melanopogon*. 2, *concinnens*. 3, *agricola*. 4, *sorghophilus*. 5, *bistrigiceps*. 6, *schoenobaenus*. 7, *paludicola*. 8, *palustris*. 9, *dumetorum*. 10, *scirpaceus*. 11, *stentoreus*. 12, *arundinaceus*. 13, *baeticatus*.

MOULT

Witherby (1929) made a preliminary survey of the moults in many Palaearctic species, and some of his conclusions appear to have been uncritically accepted by many later writers. He considered that *melanopogon* had a complete moult in autumn and a body moult in early spring. In the genus *Acrocephalus* he considered that *arundinaceus*, *scirpaceus*, *palustris*, and *schoenobaenus* had two complete moults each year; that *paludicola* had a complete autumn moult and a body moult in spring; and that (*arundinaceus*) *orientalis*, *agricola*, and *dumetorum*, were intermediate in that they showed a variable spring moult. Williamson (1960), however, examined specimens of these species from winter quarters as well as from breeding and migration localities, and the evidence from these suggests that there is one relatively protracted moult in the winter quarters, the time of which may be individually variable but may relate to the geographical locality in which overwintering occurs. The beginning of the moult is already apparent in some individuals during the autumn migration period, and the completion of it is apparent in some migrating individuals in spring. It seems likely that Witherby was misled by this fact, and deduced from such birds that there were two moults, when in fact only one occurred. The evidence at present available suggests that all the species concerned have a single annual moult in the non-breeding period.

TAIL-COCKING

The final character considered here is that of cocking the tail. B. W. Tucker (in Witherby *et al.* 1938) commented "... when moving about amongst swamp vegetation cocks its tail in a manner quite unlike an *Acrocephalus* which (its) habits otherwise resemble". However, this comparison was only with the European species and not with the full range of *Acrocephalus* species which are likely to show greater variability in posture and behaviour. The extreme morphological similarity of *melanopogon* to *A. schoenobaenus* has already been indicated. The two species are sympatric in Southern Europe and possibly in a small area of Turkestan, and appear to occupy the same type of habitat. There appears to be a slight difference in the preferred nesting site, but that is all. In view of their similarity it is to be expected that the two birds will show differences of appearance, voice, and posture, which will enable them to maintain specific identity. There is a relatively slight but nevertheless distinct difference in colour. To the human ear the songs of the two species show a general similarity but are sufficiently different to be separable. The tail-cocking might well function as a specific signal posture which helps to maintain the specific identity. D. Goodwin (pers. comm.) has pointed out that the same character could be used to separate the Blackbird, *Turdus merula*, from other *Turdus* species. This character would appear to be of specific rather than generic value.

SPECIFIC RELATIONSHIP

In view of the lack of valid characters for separation and in view of the very close similarity of *schoenobaenus* and *melanopogon* in so many of their characters, it seems reasonable to suggest tentatively that these are especially closely related. The former is migratory, the latter mainly sedentary. The importance of this in relation to the length of the primaries

has already been mentioned. To some extent the species replace each other geographically, *schoenobaenus* having a breeding range extending from Scandinavia through Europe to the Mediterranean and eastwards into Siberia, while *melanopogon* is present to the south of this. The latter species has a discontinuous distribution, one race being found around the Caspian Sea, eastwards into Turkestan, and south to Iran and Iraq, while the other has a broken distribution through southern Europe on the edge of the Mediterranean, and into north-west Africa. This suggests that the species may have had a more continuous distribution in earlier times, and have been isolated in residual areas by the increasing aridity of the Middle East and North Africa. The decrease of suitable swampy breeding areas to the south may have brought it into secondary contact with *schoenobaenus*, with which it may share a common ancestral origin, sufficient differences having evolved during isolation to ensure specific separation. At the present time the distribution of the two species is mainly allopatric in Asia, with possible sympatry in two small areas; but there is considerable sympatry in southern Europe.

CONCLUSION

From the evidence available it is considered that *Lusciniola* is not a valid and separate genus, the single species concerned not being generically separable from species in the genus *Acrocephalus*. The latter generic name having nomenclatoral priority, the specific name of the Moustached Warbler should now be *Acrocephalus melanopogon* (Temminck).

References:

Dorst, J. 1962. *The migration of birds*. Heinemann: London.
Kipp, F. A. 1942. Ueber Flügelbau und Wanderzug der Vögel. *Biol. Zbl.* 62: 189–299.
Kipp, F. A. 1958. Zur Geschichte des Vogelzuges auf der Grunflage der Flügelanpassengun. *Vogelwarte* 19: 233–242.
Meinertzhagen, R 1951. Review of the Alaudidae. *Proc. Zool. Soc. Lond.* 121; 81–132.
Seebohm, H. 1881. *Catalogue of the birds in the British Museum*. Vol. 5. London.
Stegmann, B. 1962. Die verkümmerte distale Handswinge des Vogelflügels. *Journ. f. Ornith.* 103; 50–85.
Williamson, K. 1960. Identification for Fingers. 1. *Brit. Trust. Ornith. Field Guide* no. 7.
Witherby, H. F. 1929. The moults of European Passeres. *Journ. f. Ornith.* Erg. 2: 236–248.
Witherby, H. F. *et. al.* 1938. *The Handbook of British Birds*. Vol. 2. Witherby: London.

Spotted breast variants in the European Green-winged Teal and the Northern Pintail

by James M. and Jeffery G. Harrison

Received 25th September, 1962

The two specimens to be described show a striking and unusual degree of spotting of the breast. The first is a drake European Green-winged Teal *Anas crecca crecca* Linnaeus, which was shot on the Isle of Sheppey, Kent on 7th December, 1956 by J. M. H. The bird was in normal full winter plumage at the time and as it was only wing-tipped, it was kept alive with our wildfowl collection until it died on 1st June, 1962. When this happened, we were surprised to find that the entire belly was well marked with black spots, smaller than on the upper breast and merging with the grey vermiculations between the legs. While alive, this unusual plumage was not